**ANIONIC SURFACTANTS AS MBAS**
**SM 18th Ed. 5540 C**

Facility Name:_____VELAP ID_____

Assessor Name:_____Analyst Name:_____Inspection Date_____

| Relevant Aspect of Standards | Method Reference | Y | N | N/A | Comments |
|---|---|---|---|---|---|
| *Records Examined:* SOP Number/ Revision/ Date _____ Analyst:_____<br>Sample ID: _____ Date of Sample Preparation:_____ Date of Analysis:_____ | | | | | |
| Was reagent grade water MBAS-free? | 3.l | | | | |
| Were samples analyzed using a spectrophotometer or filter photometer at 652nm? | 2.a | | | | |
| Did calibration curves have correlation coefficients of 0.995 or better? | 4.a | | | | |
| Were sample volumes selected based on the expected concentration?<br>0.025-0.080 mg/L, use 400 mL<br>0.08-0.40 mg/L, use 250 mL<br>0.4-2.0 mg/L, use 100 mL<br>>2mg/L, dilute to 100 mL with water | 4.b | | | | |
| Were samples where interferences were expected sublated by extracting with methanol and nitrogen gas and then heating to dryness prior to the re-addition of water? | 4.b | | | | |
| Were a few drops of 30% $H_2O_2$ added to samples where sulfides decolorized methylene blue? | 4.c | | | | |
| Were samples made alkaline after placing in separatory funnels by the dropwise addition of 1N NaOH with the use of phenolphthalein indicator? | 4.d.1 | | | | |
| Did samples then have their pink color discharged by the addition of 1N $H_2SO_4$? | 4.d.1 | | | | |
| Were 10 mL of $CHCl_3$ and 25 mL of methylene blue reagent then added to samples, and the samples mixed? | 4.d.2 | | | | |
| If at any time after the addition of 25 mL of methlyene blue reagent any samples lost their blue color during extraction, were such samples discarded, and extraction repeated with smaller volumes? | 4.d.2<br>4.d.3 | | | | |
| Notes/Comments: | | | | | |

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| Relevant Aspect of Standards | Method Reference | Y | N | N/A | Comments |
|---|---|---|---|---|---|
| If consistent emulsions formed during extractions with $CHCl_3$, were those emulsions broken by addition of <10 mL of isopropyl alcohol, and then was that same volume of isopropyl alcohol added to all standards? | 4.d.2 | | | | |
| Were samples extracted three times with $CHCl_3$? | 4.d.3 | | | | |
| Were all three $CHCl_3$ extracts from each sample combined into a separatory funnel, shaken for 30 seconds with 50 mL of wash solution, and allowed to settle? | 4.d.4 | | | | |
| Were $CHCl_3$ layers then drawn off from the separatory funnels through plugs of glass wool, and the wash solutions extracted twice with $CHCl_3$ with the $CHCl_3$ layers being drawn through the glass wool into the same vessel? | 4.d.4 | | | | |
| Were aborbances of extracts determined at 652 nm against a blank of $CHCl_3$? | 4.e | | | | |
| Were calculations made correctly?<br>mg MBAS/L = (μg apparent LAS) / (mL original sample) | 5 | | | | |
| Notes/Comments: | | | | | |




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